

# Corn Herbicide Showcase: No Atrazine

## Arlington, WI 2022

### Trial Information

Trial Sponsor(s): Syngenta, Summit Agro

Objective: Evaluate multiple 1- and 2-pass corn herbicide programs without atrazine for weed control and crop safety

Crop: Corn

Hybrid: NK9653-5222-EZ1

Weed species (pressure): common ragweed (moderate)  
common lambsquarters (moderate)  
giant foxtail (high-very high)  
woolly cupgrass (moderate)

Herbicide Application(s): PRE – 4/29  
EPOST – 6/2 (V4 corn)  
POST – 6/9 (V5 corn)

For the full report see trial #22-ARL-CN05 in the [2022 Wisconsin Weed Science Research Report](#)



**Cropping Systems Weed Science**  
UNIVERSITY OF WISCONSIN-MADISON

**syngenta**

The logo features a stylized green mountain peak icon above the word "Summit" in a large, bold, dark gray sans-serif font, with "Agro" in a smaller font below it and "USA" in a smaller font to the right.

# Corn Herbicide Showcase: No Atrazine (Arlington, WI 2022)

Trt #	Herbicide (rate acre <sup>-1</sup> )	Common Ragweed (%)				Lambsquarters (%)				Annual Grasses <sup>c</sup> (%)				Yield <sup>b</sup> bu acre <sup>-1</sup>	
		5/20	6/9	6/23	10/20	5/20	6/9	6/23	10/20	5/20	6/9	6/23	10/20		
1	Untreated Check	0	0	0	0	0	0	0	0	0	0	0	0	18 e	
<b>One-Pass – PRE (4/29)</b>															
2	Acuron Flexi (2.25 qt)	97	96	100	99	100	100	100	100	88	83	63	49	183 cd	
3	Resicore (2.75 qt)	97	96	99	98	100	100	100	100	93	87	74	65	197 bc	
4	TriVolt (20 fl oz)	95	93	100	98	100	99	100	100	77	83	72	68	196 bcd	
5	Maverick (1 qt)	99	98	99	100	100	100	100	100	58	76	65	50	174 d	
<b>One-Pass – EPOST (6/2)</b>		<b>EPOST</b>				<b>EPOST</b>				<b>EPOST</b>					
6	Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	0	59	100	100	0	71	100	100	0	59	100	91	218 ab	
7	Halex GT (3.8 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	0	57	100	99	0	70	100	100	0	58	97	90	221 a	
8	Maverick (14 oz) + Roundup PM3 (25 oz) + AMS (2.5% v/v)	0	67	100	100	0	83	100	100	0	60	99	93	227 a	
9	Resicore (1.25 qt) + Roundup PM3 (25 oz) +AMS (2.5% v/v)	0	63	100	100	0	78	100	100	0	59	93	85	221 a	
<b>Two-Pass – PRE (4/29) <i>fb</i> POST (6/9)</b>		<b>POST</b>				<b>POST</b>				<b>POST</b>					
10	Dual II Magnum (1.33 pt) <i>fb</i> Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	26	26	100	100	90	40	100	100	84	77	99	97	227 a	
11	TripleFlex II (2 pt) <i>fb</i> Capreno (3 oz) + Roundup PM3 (30 oz) + AMS (2.5% v/v)	95	79	100	100	100	99	100	100	87	74	100	94	223 a	
12	Restraint (30 oz) + Princep 4FL (1 qt) <i>fb</i> Shieldex (1 oz) +Status (2.5 oz) +COC (1 v/v%) +AMS (2.5%)	73	70	100	100	100	96	100	100	90	84	84	88	224 a	
13	Restraint (30 oz) + Princep 4FL (1 qt) <i>fb</i> Restraint (18 oz) + COC (1 v/v%) + AMS (2.5% v/v)	91	66	100	100	100	98	100	100	89	84	88	89	216 ab	
		LSD ( $\alpha=0.10$ )	9	6	ns	ns	0.2	8	ns	ns	8	6	8	7	22
		p value	<.001	<.001	0.143	0.563	<.001	<.001	1.00	0.467	<.001	<.001	<.001	<.001	<0.001

<sup>a</sup>Visual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

<sup>b</sup>Yield values with the same letter are not significantly different.

<sup>c</sup>Annual grass species in the trial consisted of giant foxtail (predominant species) and woolly cupgrass.

# Corn Herbicide Showcase: No Atrazine Arlington, WI 2022

Plot pictures taken on 5/20  
21 days after the PRE application

The number in the upper right-hand corner is the  
average % annual grass control of 4 replications

**21 days after PRE (5/20)**  
**Untreated Check**

**0%**



**21 days after PRE (5/20)  
PRE: 2.25 qt Acuron Flexi**

**88%**



**21 days after PRE (5/20)**  
**PRE: 2.75 qt Resicore**

**93%**



**21 days after PRE (5/20)**

**PRE: 20 fl oz TriVolt**

**77%**



**21 days after PRE (5/20)**

**PRE: 1 qt Maverick**

**58%**



**21 days after PRE (5/20)  
PRE: 1.33 pt Dual II Magnum**

**84%**



21 days after PRE (5/20)

PRE: 2 pt TripleFlex II

87%



**21 days after PRE (5/20)**

**PRE: 30 fl oz Restraint + 1 qt Princep 4FL**

**89%**



# Corn Herbicide Showcase: No Atrazine Arlington, WI 2022

Plot pictures taken on 6/2

34 days after the PRE application  
The day of the EPOST application

**34 days after PRE (6/2)**  
**Untreated Check**



**34 days after PRE (6/2)  
PRE: 2.25 qt Acuron Flexi**



34 days after PRE (6/2)  
PRE: 2.75 qt Resicore



**34 days after PRE (6/2)**  
**PRE: 20 fl oz TriVolt**



**34 days after PRE (6/2)  
PRE: 1 qt Maverick**



34 days after PRE (6/2)  
PRE: 1.33 pt Dual II Magnum



**34 days after PRE (6/2)  
PRE: 2 pt TripleFlex II**



34 days after PRE (6/2)

PRE: 30 fl oz Restraint + 1 qt Princep 4FL



# Corn Herbicide Showcase: No Atrazine Arlington, WI 2022

Plot pictures taken on 6/9

41 days after the PRE application  
7 days after the EPOST application  
The day of the POST application

The number in the upper right-hand corner is the  
average % annual grass control of 4 replications

**41 days after PRE (6/9)**

**Untreated Check**

**0%**



41 days after PRE (6/9)  
PRE: 2.25 qt Acuron Flexi

83%



41 days after PRE (6/9)  
PRE: 2.75 qt Resicore

87%



41 days after PRE (6/9)  
PRE: 20 fl oz TriVolt

83%



41 days after PRE (6/9)  
PRE: 1 qt Maverick

76%



7 days after EPOST (6/9)

EPOST: 3.75 pt Acuron GT + 0.25% NIS + 2.5% AMS

59%



7 days after EPOST (6/9)

EPOST: 3.8 pt Halex GT + 0.25% NIS + 2.5% AMS

58%



7 days after EPOST (6/9)

EPOST: 14 fl oz Maverick + 25 fl oz Roundup PM3 + 2.5% AMS

60%



7 days after EPOST (6/9)

EPOST: 1.25 qt Resicore + 25 fl oz Roundup PM3 + 2.5% AMS

59%



41 days after PRE (6/9)  
PRE: 1.33 pt Dual II Magnum

77%



41 days after PRE (6/9)  
PRE: 2 pt TripleFlex II

74%



41 days after PRE (6/9)

PRE: 30 fl oz Restraint + 1 qt Princep 4FL

84%



# Corn Herbicide Showcase: No Atrazine Arlington, WI 2022

Plot pictures taken on 6/56

55 days after the PRE application

21 days after the EPOST application

14 days after the POST application

The number in the upper right-hand corner is the average % annual grass control of 4 replications

55 days after PRE (6/23)

Untreated Check

0%



**55 days after PRE (6/23)  
PRE: 2.25 qt Acuron Flexi**

**63%**



55 days after PRE (6/23)

PRE: 2.75 qt Resicore

74%



**55 days after PRE (6/23)**  
**PRE: 20 fl oz TriVolt**

**72%**



55 days after PRE (6/23)

PRE: 1 qt Maverick

65%



21 days after EPOST (6/23)

EPOST: 3.75 pt Acuron GT + 0.25% NIS + 2.5% AMS

100%



21 days after EPOST (6/23)

97%

EPOST: 3.8 pt Halex GT + 0.25% NIS + 2.5% AMS



**21 days after EPOST (6/23)**

**99%**

**EPOST: 14 fl oz Maverick + 25 fl oz Roundup PM3 + 2.5% AMS**



21 days after EPOST (6/23)

93%

EPOST: 1.25 qt Resicore + 25 fl oz Roundup PM3 + 2.5% AMS



14 days after POST (6/23)

PRE: 1.33 pt Dual II Magnum *fb*

POST: 3.75 pt Acuron GT + 0.25% NIS + 2.5% AMS

99%



14 days after POST (6/23)

PRE: 2 pt TripleFlex II *fb*

POST: 3 fl oz Capreno + 30 fl oz Roundup PM3 + 2.5% AMS

100%



14 days after POST (6/23)

PRE: 30 fl oz Restraint + 1 qt Princep 4FL *fb*

POST: 1 fl oz Shieldex + 2.5 oz Status + 1% COC + 2.5% AMS

84%



**14 days after POST (6/23)**

**PRE: 30 fl oz Restraint + 1 qt Princep 4FL *fb***

**POST: 18 fl oz Restraint + 1% COC + 2.5% AMS**

**88%**

